# MAINE FUEL BOARD MEETING MINUTES

Meeting Date: July 10, 2014

Meeting Location: Central Conference Room

Time Meeting Began: 9:00 a.m.

### CALL TO ORDER AND WELCOME/INTRODUCTIONS

Board Chair, Barry Austin, called the meeting to order.

The following members were present:

Barry Austin
Paul McClay
Lionel Landry
Jeffrey Choate
Dale Canning
Jonathan Klages
David Foster
Mark Bossie

The following members were absent:

**Charles Martin** 

### Staff Present:

Catherine Carroll, Board Administrator Vickey Gray, Board Clerk Peter Holmes, Senior Inspector Dale Hersey, Inspector Holly Doherty, OPOR Attorney

### AAG Present:

**Judith Peters** 

### **OLD BUSINESS**

Action on Board Minutes of May 14, 2014

A motion was made to approve the May 14, 2014 minutes as written.

Motion: David Foster Second: Jeffrey Choate

### **NEW BUSINESS**

### Chapter 13, Section 13.7 - Summary of Board Discussion on Sections 13.7.1 and 13.7.1.2)

### Technicians conducting safety testing at the job site

The Board discussed whether Section 13.7.1, as adopted on February 28, 2014, which requires burner or appliance manufacturers to conduct safety testing is necessary since technicians are responsible for conducting combustion testing at the job site prior to placing a unit into service. They discussed the issue of modern appliances having very specific requirements for chamber pressures, draft movement through the appliance and the depth the burner tube is inserted into the burn chamber of the appliance. They concluded that without the testing being done by the manufacturer of the appliance or burner those technicians would have no way of knowing what the installation requirements are for the specific appliance. It was mentioned that if a burner assembly was not inserted in the proper position by technicians that they may or may not get acceptable initial efficiency readings. Another issue that was discussed was if technicians could simply match the insertion depth with the old oil burner. The conclusion was that this technique may work for a while but if there is too much heat on the burner, the burner may burn off or distort causing a malfunction. This would not be evident at the time of installation, but testing by the manufacturer would reveal such problems and corrections to these problems would be provided to technicians in the set up parameters to ensure safe operation. Testing by the manufacturer allows for integrate calculations to ensure proper chamber pressures and draft drop through an appliance, which will allow technicians to make fine tune adjustments to that appliance while at the job site so that the appliance can perform at its peak. The Board concluded that technicians are trained and skilled to follow an installation guide containing instructions on performing combustion testing prior to placing the unit into service and do not have the necessary experience or resources to perform safety testing. Safety testing by the burner or appliance manufacturer ensures that the burner is installed in a manner that will safely and efficiently operate in today's newer appliances.

### *Testing older appliances and newer appliances*

The Board discussed whether there have been problems when burners are not tested for converting to burning gas. It was stated that older appliances are likely able to burn another source of fuel and that problems resulting from burning other sources of fuel are probably infrequent. Newer appliances are designed to burn a certain fuel and are likely candidates for safety testing which results in the necessity for "set up parameters" and instructions that are suitable for that appliance in order for technicians to follow while conducting installation and combustion testing.

## Distinction between a burner that's been "Approved" and a burner that's been "Tested"

The Board discussed the distinction between a burner that is "approved" and a burner that is "tested". The Board concluded that a burner that is approved to be converted to burn gas would have had to undergo a safety test, first. The Board discussed the fact that an approval may simply end up being a set of mathematical calculations based on all appliances rather than actually testing the burner. The Board decided that the term "approved" has a vague meaning and would confuse and possibly mislead technicians and homeowners on what approved means and based on what criteria.

### The importance of safety testing for determining venting configurations

The Board commented that safety testing includes calculating venting configurations such as direct vent and that these calculations may not be taken into consideration if a burner or appliance is not tested and only approved. Conversely, mathematical calculations in and of itself are not sufficient for all venting configurations.

### Availability of burner manufacturers that conduct safety tests

The Board commented that there are some burner manufacturers who do not want to spend the money to test their burners, however Section 13.7.1, as adopted on February 28, 2014, does not hinder a consumer or technician from finding a burner manufacturer that has safety tested their burner with a certain make and model of appliance for gas conversion.

### Applicability of NFPA 54

The Board verified that the National Fire Protection Association (NFPA 54) references ANSI Z21.8 and that ANSI Z21.8 doesn't address safety testing.

# Motions and Votes on Public Comments on Chapter 13, Section 13.7.1

### Comment

Ron Cote, Carlin Combustion Technology (written and oral)

The commenter stated that Section 13.7.1 (2) mandates 'make and model' testing which is unnecessary when national codes, ANSI Z 21.8, NFPA-54, NFPA-70, and any other applicable codes have been adopted. The commenter proposed alternative language in 13.7.1(2) that does not require specific makes and models of an appliance to be tested.

### Comment

Avery Day, Unitil (oral)

The commenter stated a concern that consumers will replace existing heating systems instead of just replacing a burner if Section 13.7.1 is interpreted to require that each burner and boiler/furnace configuration be tested and deemed acceptable to be converted for use with natural gas or propane. The commenter requested that the requirements in Section 13.7.1 be revised so that consumers can merely install a conversion burner and manufacturers do not have to test every possible configuration.

A motion was made to not accept these comments for modification of rule and to keep the language in Chapter 13, Section 13.7.1, as adopted on February 28, 2014.

Motion: Jonathan Klages Second: Paul McClay The previous motion was amended to also not accept *the following three comments* for modification of rule and to keep the language in Chapter 13, Section 13.7.1, as adopted on February 28, 2014.

Motion: Jonathan Klages Second: Paul McClay

### Comment

Frank Fitzpatrick, R.W. Beckett Corp. (written)

The commenter stated that Section 13.7.1 should not require appliance manufacturers to test every possible burner and boiler/furnace combination for burning natural gas and propane. Appliance manufacturers will not take the time or spend the money to test every possible unit they build with a conversion burner because they do not sell conversion burners with their equipment.

### Comment

Maine Natural Gas Corporation – Brian K. Hawley, Unitil Service Corporation – Mark A. Lambert, & Avery Day, Summit Natural Gas of Maine – Stacey A. Fitts, collectively, "the Natural Gas Utilities" (oral and written)

The commenters consider the proposed rules to be an impediment to consumers converting heating systems to use natural gas because every make and model of appliance would have to be tested for safety and combustion. Such testing is unnecessary and unwarranted, and leaves homeowners little choice but to have new heating systems installed because manufacturers will not test burners potentially converted to use natural gas.

The commenters proposed alternative language to 13.7.1(2) that would eliminate the need for every make and model to be tested and added language to 13.7.1(3) that would allow for appliances which are no longer manufactured to be converted to burn natural gas.

### Comment

John James and John Sunderland, Bath North-End Natural Gas Working Group, (oral and written)

The commenters interpreted Section 13.7.1 to require that every existing burner and boiler to be converted for use with natural gas or propane would have to be tested for combustion safety with every combination of a model of burner with every model of boiler. This testing is likely to be burdensome and unrealistic for the manufacturers of burners and boilers because each and every combination of burner and boiler would have to be tested. It is more likely that the manufacturers would recommend replacing entire heating systems designed to burn natural gas and propane to avoid individual testing. Replacing entire heating systems is costly for consumers when, alternatively, replacing a burner that can use gas and natural propane is less expensive. The commenters suggested language in Section 13.7.1 that would remove the testing requirement and require technicians to follow a burner manufacturer's installation instructions and applicable code requirements listed paragraph 3 of Section 13.7.1.

In Favor: Paul McClay, Mark Bossie, Jonathan Klages, Jeffrey Choate and Dale Canning Opposed: Lionel Landry, David Foster and Barry Austin Motion Carried

### Comment<sub></sub>

Michael Howe, Bell Siemens Company (oral)

The commenter stated that his company has experienced no issues with selling conversion gas burners to technicians and that ANSI Z21.8 and NFPA 54 are sufficient installation burner standards for these technicians to follow.

### Comment

Roger Bellefleur, Unitil Service Corporation (oral)

The commenter believes that the standards set by NFPA 54, NFPA 211, ANSI Z 21.8 and a conversion burner installation manual are adequate to protect the customer without additional requirements proposed in Section 13.7.

A motion was made to not accept these comments for modification of the rule and to keep the language in Chapter 13, Section 13.7.1 as adopted on February 28, 2014.

Motion: Jonathan Klages Second: Paul McClay

**Unanimous** 

### Comment

Michael Adler, Adler's Plumbing & Heating (written)

The commenter recommended that technicians installing conversion burners should obtain written permission from the burner manufacturer prior to installation that states that the burner is usable with natural gas or propane. The commenter provided suggested language for the Board to consider.

A motion was made to not accept this comment for modification of the rule and to keep the language in Chapter 13, Section 13.7.1, as adopted on February 28, 2014.

**Motion: Dale Canning Second: Jeffrey Choate** 

Dennis Steinert, Licensed Master Oil Burner Technician and Propane and Natural Gas Technician (oral)

The commenter stated that technicians assume liability for any installation of burners and appliances regardless of the age of the appliance or the fuel source. Appliances that are aged and not properly maintained are likely to run inefficiently and an old boiler burning natural gas or propane that is not operating properly may increase the potential for carbon monoxide poisoning. The commenter believes that, in many cases, older equipment should be replaced with newer equipment rather than retrofitting conversion burners to existing appliances in order to get the full potential of the higher efficiency available in today's equipment.

A motion was made to not take any action on the comment. No action is required.

Motion: Jonathan Klages Second: Mark Bossie

**Unanimous** 

### Comment

Will Beck, Maine Energy Marketers Association (oral)

The commenter supports the Board's adoption of conversion burner rules in Section 13.7 to ensure public safety. The commenter also supports rules that improve efficiency and reduce resource consumption for the Maine consumer.

A motion was made to not take any action on the comment. No action is required.

Motion: Jonathan Klages Second: Mark Bossie

Joseph Rose, President/CEO, Propane Gas Association of New England (written)

The commenter noted that there is a typographical error subsection 13.7.1(3). The words "is no" should be inserted before the word "longer" so that this subsection reads:

"3. In the case of an appliance the manufacturer of which is no longer available, ...."

A motion was made to not take any further action on the comment since the typographical error was corrected in Chapter 13, Section 13.7.1(3) prior to the board's July 10<sup>th</sup> deliberations.

**Motion: Lionel Landry Second: Jonathan Klages** 

**Unanimous** 

# Motions and Votes on Comments on Chapter 13, Section 13.7.2

### Comment

Gavin McCarthy, Pierce Atwood LLP, on behalf of Mechanical Services, Inc. (written)

The commenter stated that Section 13.7.2 requires a burner manufacturer to conduct safety and combustion testing on every combination of a model of burner and model of boiler it might use in a conversion, and that the rule does not specify what the test requirements are. The commenter stated that testing every combination of burner and boiler is costly and that this testing requirement is not based on a standard that is technically comprehensive. The commenter proposed alternative language to the testing requirements in Section 13.7.2 that would require the burner manufacturer to select the burner to be used in accordance with accepted engineering practices.

### Comment

Chris Green, President, Mechanical Services, Inc. (written)

The commenter stated that manufacturers who build their own burners are unlikely to test every conceivable variation burner on their equipment as Section 13.7.2 requires. A manufacturer's burner that is Underwriters' Laboratories "UL" certified is confirming that the burner will operate safely and that a professional engineer is ensuring that the burner and AMSE-stamped pressure vessel will work safely. There should be no additional testing.

Section 13.7.2 should apply to burners with BTUs greater than 400,000 but less than 12,500,000.

#### Comment

Daniel Burnell, Senior Vice President of Blake Equipment, Northeast Mechanical (oral and written)

The commenter stated that the boiler/burner packages his company manufactures are engineered, constructed, designed, and tested as a listed and approved Underwriters' Laboratories "UL" package. Section 13.7.2 should require that a boiler using an integral burner that is built into the front head of the boiler carry a UL or certified package label. Additionally, the board should adopt rules similar to Canadian standards on conversion burners on equipment that has not been *certified* or the manufacturer no longer exists.

### Comment

Maine Natural Gas Corporation – Brian K. Hawley, Unitil Service Corporation – Mark A. Lambert, & Avery Day, Summit Natural Gas of Maine – Stacey A. Fitts, collectively, "the Natural Gas Utilities" (oral and written)

The commenters consider the proposed rules to be an impediment to consumers converting heating systems to use natural gas because every make and model of appliance would have to be tested for safety and combustion. Such testing is unnecessary and unwarranted, and leaves homeowners little choice but to have new heating systems installed because manufacturers will not test burners potentially converted to use natural gas.

The commenters suggested that Section 13.7.2(1) should give the installer the authority to use acceptable engineering practices to determine whether the appliance is capable of being used for natural gas consumption, if the manufacturer no longer exists. The commenters also proposed a change to 13.7.2(2)(A), that would require a burner manufacturer to provide written documentation that a burner is approved for use in an appliance using accepted engineering practices, rather than being approved by a licensed professional engineer.

### **Comment**

Jonathan Kunz - Bangor Gas Company (written)

The commenter worked with the Board and burner/boiler manufacturers, contractors, the fuel industry and state officials to determine procedures for installing conversion burners and switching fuel sources. The commenter stated that the Board had concluded after several meetings that there were no safety issues when converting oil boilers to propane and natural gas, and approved the use of Certified Conversion Burners as long as burner manufacturers provided an installation and combustion set-up manual for the installers. The commenter supported the clarifying language in Section 13.7.2 as presented by staff after the public hearing.

The commenter disagrees with the findings under criteria contained in Executive Order 20 FY 11/12 in that Section 13.7.2 and Section 13.7.3 negatively impact job growth by making it impossible for independent contractors and energy companies to convert existing oil boilers to propane and natural gas, that there are excessive costs to both businesses and consumers should the proposed rules be approved as written, and that it would cost customers millions of dollars to convert heating systems to natural gas and propane. Simple burner conversion that is considerably less expensive than replacing entire heating systems.

### Comment

Bruce Damon, Damon Mechanical (oral)

The commenter stated that the proposed testing rules should not prevent the consumer from using natural gas and propane and supports alternative language to Section 13.7.2 as suggested by Mechanical Services. Section 13.7 re-states requirements for venting when connecting these conversion units to existing chimneys.

A motion was made to not accept these comments for modification in Chapter 13, Section 13.7.2 and to keep the language as adopted on February 28, 2014.

Motion: Jonathan Klages Second: David Foster Opposed: Lionel Landry

In Favor: Paul McClay, David Foster, Mark Bossie, Jonathan Klages, Jeffrey Choate, Dale

**Canning and Barry Austin** 

**Motion Carried** 

### Comment

Chris Green, President, Mechanical Services, Inc. (written)

The commenter stated that manufacturers who build their own burners are unlikely to test every conceivable variation burner on their equipment as Section 13.7.2 requires. A manufacturer's burner that is Underwriters' Laboratories "UL" certified is confirming that the burner will operate safely and that a professional engineer is ensuring that the burner and AMSE-stamped pressure vessel will work safely. There should be no additional testing.

Section 13.7.2 should apply to burners with BTUs greater than 400,000 but less than 12,500,000.

#### Comment

Daniel Burnell, Senior Vice President of Blake Equipment, Northeast Mechanical (oral and written)

The commenter stated that the boiler/burner packages his company manufactures are engineered, constructed, designed, and tested as a listed and approved Underwriters' Laboratories "UL" package. Section 13.7.2 should require that a boiler using an integral burner that is built into the front head of the boiler carry a UL or certified package label. Additionally, the board should adopt rules similar to Canadian standards on conversion burners on equipment that has not been *certified* or the manufacturer no longer exists.

A motion was made to not accept these comments for modification of Chapter 13, Section 13.7.2 and keep the language as adopted on February 28, 2014.

Motion: Dale Canning Second: David Foster

Daniel Burnell, Senior Vice President of Blake Equipment, Northeast Mechanical (oral and written)

The commenter stated that the boiler/burner packages his company manufactures are engineered, constructed, designed, and tested as a listed and approved Underwriters' Laboratories "UL" package. Section 13.7.2 should require that a boiler using a duel-fueled burner carry a UL or certified package label. Additionally, the board should adopt rules similar to Canadian standards on conversion burners on equipment that has not been *certified* or the manufacturer no longer exists.

A motion was made to not accept these comment for modification of Chapter 13, Section 13.7.2 and keep the language as adopted on February 28, 2014.

Motion: Lionel Landry Second: Paul McClay

**Unanimous** 

### Comment

Jonathan Kunz - Bangor Gas Company (written)

The commenter worked with the Board and burner/boiler manufacturers, contractors, the fuel industry and state officials to determine procedures for installing conversion burners and switching fuel sources. The commenter stated that the Board had concluded after several meetings that there were no safety issues when converting oil boilers to propane and natural gas, and approved the use of Certified Conversion Burners as long as burner manufacturers provided an installation and combustion set-up manual for the installers. The commenter supported the clarifying language in Section 13.7.2 as presented by staff after the public hearing.

The commenter disagrees with the findings under criteria contained in Executive Order 20 FY 11/12 in that Section 13.7.2 and Section 13.7.3 negatively impact job growth by making it impossible for independent contractors and energy companies to convert existing oil boilers to propane and natural gas, that there are excessive costs to both businesses and consumers should the proposed rules be approved as written, and that it would cost customers millions of dollars to convert heating systems to natural gas and propane. Simple burner conversion that is considerably less expensive than replacing entire heating systems.

A motion was made to take no action on the comment. The board is unsure of the point of the comment and whether the commenter supports or does not support Chapter 13, Section 13.7 as adopted on February 28, 2014.

**Motion: Dale Canning Second: Lionel Landry** 

Patrick C. Woodcock, Governor's Energy Office (written)

The commenter stated that the testing of burners for specific boilers would have a negative impact on providing affordable energy to Maine homes and that there isn't a need for the requirement to test burners for specific boilers. The commenter supports alternative language proposed by gas utilities that requires burners converted to burn natural gas and propane to be approved using standard engineering practices.

A motion was made to not accept this comment for modification of Chapter 13, Section 13.7.2 and to keep the language as adopted on February 28, 2014.

Motion: David Foster Second: Jonathan Klages

**Unanimous** 

### Comment

Bruce Damon, Damon Mechanical (oral)

The commenter stated that the proposed testing rules should not prevent the consumer from using natural gas and propane and supports alternative language to Section 13.7.2 as suggested by Mechanical Services. Section 13.7 re-states requirements for venting when connecting these conversion units to existing chimneys.

A motion was made to not accept this comment for modification of Chapter 13, Section 13.7.2 and to keep the language as adopted on February 28, 2014.

Motion: David Foster Second: Jeffrey Choate

**Unanimous** 

A motion was made to keep the following as a NOTE in Chapter 13, Section 13.7.2:

"NOTE: The appliance/burner manufacturer or licensed professional engineer must provide installation and combustion set-up instructions for the appliance."

**Motion: David Foster Second: Jonathan Klages** 

# Lorax Systems, Inc. – Presentation on "Line Guardian" Product

Representatives from Lorax Systems, Inc. presented to the board "Line Guardian" which is a mechanical valve that monitors the integrity of the product delivery line and ensures that it has not been compromised in any way.

# **Administrators Report**

Catherine Carroll informed the members that Prometric has assured her that the revised master, journeyman and appliance connection & service examinations will be live by July 31, 2014.

# **Senior Inspector's Report**

Peter Holmes reported on the following:

Emerging Tech Pilot Project

• 1 additional applications bringing total to 11 in year 2

No new applications from manufacturer's to be accepted to project

Request from the Fire Marshal's Office

• Explosion at a Rt. 1 Restaurant with two victims. Mistakenly opened valve let gas escape into building.

### Compressed Natural Gas

Peter reported that he had attended a meeting of the New England Fire Marshals where they are all concerned about the growing CNG with no applicable code. Representatives from NH, MA, CT, Vt and R. McCarthy met along with representatives of NFPA including liaison to MFPA 55. NH and VT showing large increase of daughter stations most often in cities as opposed to the rural installations which we have seen here. It was decided that the group will request that the NFPA 55 committee which is in a review cycle accept a TIA to add another chapter on CNG. Some of the concerns were:

- Lack of required fire safety analysis
- Lack of operational/emergency action plan (including plume projections with and without fire
- Lack of required siting distances for both compression and consumer stations
- Lack of maximum storage amounts of CNG either at compressor stations awaiting transport or number of trailers allowed at one consumer site
- Lack of required training for personnel
- Lack of requirement for any attending personnel at either compressor or consumer site
- Lack of requirements for protection from tampering on both compressor and consumer stations
- Lack of remote manual emergency shutdown requirements on both trailers and facilities

- Lack of emergency shutdown systems in case of a hose leak or rupture
- Lack of chock blocking requirements for trailers either loading or at a consumer station
- Lack of required distances for ignition sources, (including integral boilers) to transfer points or relief points

### Bulk Plants & Dispenser Stations

- Still active on both fronts
- Many bulk plants are adding tanks to existing plants
- Second digital dispenser added in Portland
- At least 3 CNG Dispensers in the works
- Uptick in SS vehicle fuel dispensers mostly for private fleets

### Licensing Reorganization Project

- Progressing slowly no specific activity to report getting structural issues hammered out
- Slight delay due to rule adoption process

### **OTHER BUSINESS**

None.

# **ADJOURNMENT**

A motion was made to adjourn at 12:02 p.m.

Motion: David Foster Second: Paul McClay

Unanimous

Respectfully submitted, Vickey Gray